# DT05 Rec'd PCT/PT0 0 8 OCT 2004

WO 03/085113

#### PCT/IB03/01414

#### 06052PC1.ST25.txt SEQUENCE LISTING

<110>	University Basel	
<120>	Enhancer sequence of the 5-aminolevulinic acid synthase gene	
<130>	06052PC1	
<150> <151>	PCT/IB02/01258 2002-04-09	
<160>	39	
<170>	PatentIn version 3.1	
<210> <211> <212> <213>	1 167 DNA Gallus gallus	
<400> ctgcct	1 ccag tcctgaactt tctctgctgg gatgagcaga gttcacgctc ggctgaactc	60
gtgact	gtgt caacaggggg catgaagatc agcaccaggc aaaggtgagc ggagtgcaca	120
	aggc agagaccttt gggacaaaga gttccccacc cgtgggg	167
<210> <211> <212> <213>	2 176 DNA Gallus gallus	
<400> gggctc	2 catc ggcctcttca ggttattgct atgttcaact cgtgtgacct tcctccctgt	60
tttcaa	aggtt ctgataacaa acttctagga cagcctggtg acctttggct cagcttcctc	120
tttaaa	actoc ggtggotttt gottoattgo otagttgtta occagoagta aagato	176
<210><211><212><213>	3 175 DNA Mus musculus	
<400> tgagc	3 tcatc aggttcctgg tggagagctg ggtgaaccga gttcgtttgc actgccttgg	60
cctgt	gtgtg gcttcaggaa caggtcatgc tccaggattt aggacacagg ttagctgata	120
aggcc	catgg agccggtgat atgacccgca gggtcactcc ctctgcccaa gtcta	175
<210> <211> <212> <213>	280 DNA	
<400> agtcc	4 agtca gaaccttctg gcttctgcca tgagacagcc tatgagctca tcaggttcct	60
ggtgg	agagc tgggtgaacc gagttcgttt gcactgcctt ggcctgtgtg tggcttcagg	120

			6052PC1.ST2			400	
aacaggtcat	gctccaggat	ttaggacaca	ggttagctga	taaggcccat	ggagccggtg	180	
atatgacccg	cagggtcact	ccctctgccc	aagtctagat	acttgtttcc	ctctttagac	240	
tccagatcaa	ggactccaga	tctgtcatgg	actcagaaaa			280	
<210> 5 <211> 321 <212> DNA <213> Mus	musculus						
<400> 5 agtccagtca	gaacettetg	gcttctgcca	tgagacagcc	tatgagctca	tcaggttcct	60	
ggtggagagc	tgggtgaacc	gagttcgttt	gcactgcctt	ggcctgtgtg	tggcttcagg	120	
aacaggtcat	gctccaggat	ttaggacaca	ggttagctga	taaggcccat	ggagccggtg	180	
atatgacccg	cagggtcact	ccctctgccc	aagtctagat	acttgtttcc	ctctttagac	240	
tccagatcaa	ggactccaga	tctgtcatgg	actcagaaaa	cccccagta	ccaccccacc	300	
cccgctgctc	cctcctatga	t				321	
<210> 6 <211> 328 <212> DNA <213> Mus							
<400> 6 gtggctgggt	tgggatggga	tgggaaggct	tgtgtctctc	tgattcctag	tccagtcaga	60	
accttctggc	ttctgccatg	agacagccta	. tgagctcatc	aggttcctgg	tggagagctg	120	
ggtgaaccga	gttcgtttgc	actgccttgg	cctgtgtgtg	gcttcaggaa	caggtcatgc	180	
tccaggattt	aggacacagg	ttagctgata	aggcccatgg	agccggtgat	atgacccgca	240	
gggtcactco	ctctgcccaa	gtctagatac	ttgtttccct	ctttagacto	cagatcaagg	300	
actccagato	tgtcatggac	tcagaaaa				328	
<210> 7 <211> 369 <212> DNP <213> Mus	1			-		·:-	, •
<400> 7 gtggctgggt	: tgggatggga	tgggaaggct	tgtgtctctc	: tgattcctag	g tccagtcaga	60	
accttctgg	ttctgccatg	agacagccta	tgagctcato	c aggttcctg	g tggagagctg	120	
ggtgaaccga	gttcgtttgc	actgccttgg	g cctgtgtgt;	g gcttcagga	a caggtcatgc	180	
tccaggattt	aggacacagg	ttagctgata	a aggcccatg	g agccggtga	atgacccgca	240	
gggtcactco	ctctgcccaa	gtctagatac	ttgtttccc	t ctttagact	cagatcaagg	300	
actccagato	c tgtcatggac	tcagaaaaco	ccccagtac	accccaccc	cgctgctccc	360	
taatataat			•			369	

#### 06052PC1.ST25.txt

<210> <211> <212> <213>	8 174 DNA Homo	o sapiens					
<400>	8						
gcgcaaa	agtc	aacacaagcc	tctccaccgt	gtgtccatgt	ttatgtgtat	gcgctgtgcc	60
ccgtcal	gcc	acctggacgc	agggactcca	gtgacctctc	cttgcacaag	cctctgctgg	120
tttggga	aaag	attggcatga	catcagccaa	gctctggcct	tgcctttttt	ccct	174
<210> <211> <212> <213>	9 800 DNA Homo	o sapiens					
<400>	9 caaa	gtcaacacaa	gcctctccac	cgtgtgtcca	tgtttatgtg	tatgcgctgt	60
		gccacctgga					120
		aagattggca					180
							240
		tggctcaaga					
		gagtagaggc					300
		ggagttcaag					360
agagag	cgag	accetgeete	aaaaaaaaa	aaaaaaaaaa	aaaaagagtg	gtgggggtag	420
ggacag	ggag	atgaggaagg	ccctacagtg	gagaaagcac	caggaccaga	acccagccct	480
cccttg	tctg	aatcttgctg	cccacaggag	cctggacagt	ggccagggaa	ggttcgaatg	540
ccacac	aggt	gagettggee	tctgctctgt	aggcagtggg	aagtgctggg	agttgggcat	600
tcctgt	gagg	cgcatagtca	acattgtgag	tagggctgga	tgtcgagctg	tgagagggaa	660
actaga	agct	ggaacatcta	caggaggctt	ttaagagaag	cagagcggcc	aggtgcagtg	720
gctgac	acct	gtaatcccag	cactttgggt	ggccgagggg	gtcagaacac	ttgaggtcag	780
gagttc	gaga	ccagggtgac					800
<210><211><211><212><213>	10 935 DNA Hom						
<400>	10						<b>C</b> O
		caggaggcaa					60
ggactc	aggg	gcctcagcct	gcactcacct	gctcagcaga	gctgagctca	gggcataacg	120
tcagct	tcct	gggcagaaga	gctgccaaaa	tcaaagcttt	gctagtcaga	aaattccttg	180
ggaatg	ttga	gcaaggccac	cactgacatc	atgtgcaaat	tcgcagacag	cctctgcacc	240

PCT/IB03/01414 WO 03/085113

06052PC1.ST25.txt taaggctact cagacccaca gccttggctc gatggggtgg cagactctgt atgccaccag	300
cacacccacc cacagggcag aggggtcagg acatagaatc agacaggccc cagggacccc	360
catatteete despiss	420
agtgaagatt ataggcagcc attccccact caacagagga gaaggtcaga gccaagtctg	480
acattccccc atecectete cataacacce atgeatetgg cagtcagaca ggcctaaget aaacetttee eecccageta eecaccaggg teatececaa gccaggtcag ggccaatgga	540
aaacctttcc cccccageta cccaccayyy coaccayyy	600
ggttggggtg gagaagacag gcttggccct atttcctgcc caactcagaa ccttctggtt	660
tctgccacag gatgccttgc aagcttatcg gggtcactgt gggcagctgg gtgagctaag	720
treatetgtg etgeegtgae etetgtgeag atgeateaag aacacagagt geteeggggt	720 780
taggatgagg gcagcgctga taaggttcat ggaaccagtg acagagcaca cagctgccca	700
cagagicaci eccetgigee ecageetgga caceteagei eccieteaac ecciiecega	840
ggtgctagat gtatatggga ccagaaagcc ccctctgtgt cctcctgtgt gagagcccag	900
	935
ctgcttaggt gtttgtgact ctgggcctcg agggg )	
<210> 11 <211> 25 <212> DNA <213> Artificial sequence  <220> <223> Forward PCR primer  <400> 11 ggggaccagt ccagtcagaa ccttc	25
<210> 12 <211> 27 <212> DNA <213> Artificial sequence <220> <223> Reverse PCR primer	
<400> 12 ccgctcgagt tttctgagtc catgaca	27
<210> 13 <211> 26 <212> DNA <213> Artificial sequence	
<220> <223> Forward PCR primer  <400> 13	26
ggggtaccgt ggctgggttg ggatgg	
<210> 14 <211> 27 <212> DNA	

## 06052PC1.ST25.txt

<213>	Artificial sequence	
<220> <223>	Reverse PCR primer	
<400> ccgctc	14 cgaga tcataggagg gagcagc	27
<212>	32 DNA	
<213> <220> <223>		
-400>	15	32
ggagga	aactc gacacgatac caacatagca at	
<210><211><212><212><213>	30 DNA	
<220> <223>	•	
<400> ctatg	> 16 gttggt atcgtgtcga gttcctccct	. 30
<210><211><211><212><213>		
<220 <223		
<400 gaat	> 17 tegeca actgeageca ggetgtee	28
<210 <211 <212 <213	l> 30	
<220 <223	0> 3> reverse PCR primer	
<400 cago	0> 18 cctggct gcagttggcg aattctcctc	30
<211 <212	0> 19 1> 33 2> DNA 3> artificial sequence	
<220 <220	0> 3> forward PCR primer	

## 06052PC1.ST25.txt

<400> ccccacg	19 cag ccccaccgct cggctgaact cgt	33
<210> <211> <212> <213>	20 34 DNA artificial sequence	
<220> <223>	reverse PCR primer	
<400> gtgggg	20 ctgc gtggggcagc agagaaagtt cagg	34
<210> <211> <212> <213>	21 27 DNA artificial sequence	
<220> <223>	forward PCR primer	
<400> gaatto	21 Jacag ccatggtgaa gatcagc	27
<210> <211> <212> <213>	and the second s	
<220> <223>	reverse PCR primer	
<400> ccatgg	22 getgt gaatteagte aegag	25
<210><211><211><212><213>	24 DNA	
<220> <223>		
<400> gttta	23 aagct ggcactgtcc caaa	24
<210><211><211><212><213>	25 DNA	
<220> <223>		
<400>	> 24 ggcaca gtgccagctt taaac	25

#### 06052PC1.ST25.txt

<210> <211>	25 27		
<212>	DNA		
<213>	Artificial sequence		
<220> <223>	Probe		
	25		
	cata acgacgtcaa ccatctt		27
		•	
<210>	26		
<211>			
<212>	DNA		
<213>	artificial sequence		•
<220>	forward PCR primer		
<223>	TOTWARD FOR PITMET		
<400>		•	19
gcaggg	tgcc aaaacacat	•	
		, .	
<210>	27		
<211>			
<212>			
<213>	artificial sequence		
<220>			
<223>	reverse PCR primer		
<400>	27		24
tcgate	gatc agacttcttc aaca		24
<210>	28		
<211>		· ·	•
<212>	DNA	· · · · · · · · · · · · · · · · · · ·	M
<213>	artificial sequence		
<220>			i.
	Probe		
<400>	28		
taaca	tgccc attgatcaca attt		24
-55-5		•	
<210>	29		
<211>	22		
<212>			
<213>	artificial sequence		
<220>			
<223>	forward PCR primer		
<400>	29		22
ggtca	cgctc ctggaagata gt		
<210>	. 30		
<210°		•	
	DNA		

## 06052PC1.ST25.txt <213> artificial sequence <220> <223> reverse PCR primer <400> 30 20 gggcactgtc aaggctgaga <210> 31 <211> 20 <212> DNA <213> artificial sequence <220> <223> Forward PCR primer <400> 31 20 cgggcagcag gtcgaggaga <210> 32 <211> 22 <212> DNA <213> artificial sequence <220> <223> reverse PCR primer <400> 32 22 caggaacggg cattttgtag ca <210> 33 <211> 27 <212> DNA <213> artificial sequence <220> <223> reverse PCR primer <400> 33 27 aggccaggcg aattcaacga actcggt <210> 34 <211> 27 <212> DNA ... . .... <213> artificial sequence <220> <223> forward PCR primer <400> 34 27 cgagttcgtt gaattcgcct tggcctg <210> 35 <211> 26 <212> DNA <213> artificial sequence

Page 8

<223> forward PCR primer

#### 06052PC1.ST25.txt

<400>	35					
gccacao	cacc tgcagaggca	gtgcaa				26
<210> <211> <212> <213>	36 27 DNA artificial sequ	ience				
<220> <223>	forward PCR pr	imer				
<400> gcactgo	36 cctc tgcaggtgtg	tggcttc				27
<210><211><211><212><213>	37 27 DNA artificial sequ	ıence				
<220> <223>	forward PCR pr	imer				
<400> aattcgd	37 cctc tgcaggtgtg	tggcttc				27
<210> <211> <212> <213>	38 26 DNA artificial sequ	uence				
<220> <223>						
<400> gccacad	38 cacc tgcagaggcg	aattca				26
<210> <211> <212> <213>	39 240 DNA Homo sapiens					
<400>	39 agte agacaggeet	aagctaaacc	tttcccccc	agctacccac	cagggtcatc	60
	cag gtcagggcca			-		120
	act cagaaccttc					180
	agca gctgggtgag					240